

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4

West Broadway, Suite 425
Beach, CA 90802-4444M60050_004065
MCAS EL TORO
SSIC NO. 5090.3.A

May 10, 1996

Mr. Joseph Joyce
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
P. O. Box 95001
Santa Ana, California 92709-5001

Dear Mr. Joyce:

COMMENTS ON DRAFT WORK PLAN FOR VAPOR EXTRACTION PILOT TESTING-SITE 24, MARINE CORPS AIR STATION (MCAS) EL TORO

The California Environmental Protection Agency (Cal/EPA) has completed the review of the above subject document dated April 16, 1996, prepared by Bechtel National, Inc. The Work Plan presents the design and objectives of a soil vapor extraction pilot test designed for site 24. The test is intended to evaluate the efficiency of removing volatile organic compounds from the vadose zone at Site 24. Comments regarding the document have been prepared by the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB).

This letter is to transmit the enclosed DTSC comments and the RWQCB comments dated May 1, 1996. Please incorporate the agreed upon changes, where appropriate, and send us a response along with a revised document. Thank you for your cooperation. If you have any questions, please call me at (310) 590-4891.

Sincerely,

Tayseer Mahmoud
Remedial Project Manager
Base Closure Unit
Office of Military Facilities
Southern California Operations

Enclosures

cc: Ms. Bonnie Arthur
U. S. Environmental Protection Agency
Region IX
Hazardous Waste Management Division, H-9-2
75 Hawthorne Street
San Francisco, California 94105-3901

Mr. Joseph Joyce
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cc: Mr. Lawrence Vitale
Remedial Project Manager
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Mr. Roy Herndon
Orange County Water District
10500 Ellis Avenue
P.O. Box 8300
Fountain Valley, California 92728-8300

Lt. Hope Katcharian
Director, Environmental Engineering Division, (1AU)
Marine Corps Air Station-El Toro
P. O. Box 95001
Santa Ana, California 92709-5001

Ms. Sherrill Beard
Engineering Geologist
Department of Toxic Substances Control
245 West Broadway, Suite 350
Long Beach, California 90802

Mr. Andy Piszkin
Remedial Project Manager
Naval Facilities Engineering Command
Southwest Division
1220 Pacific Highway
San Diego, California 92132-5187

Mr. Pat Brooks
Bechtel National, Inc.
401 West A Street, Suite 1000
San Diego, California 92101-7905

Dr. Dante Tedaldi
Bechtel National, Inc.
401 West A Street, Suite 1000
San Diego, California 92101-7905

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4

45 West Broadway, Suite 425
Long Beach, CA 90802-4444

MEMORANDUM

TO: Mr. Tayseer Mahmoud
Office of Military Facilities
Region 4

FROM: Sherrill Beard, RG *Sherrill Beard*
Geological Services Unit
Region 4

Concur: Karen Baker, CHG *Karen Baker*
Geological Services Unit
Region 4

DATE: 06 May 1996

SUBJECT: Comments on "Draft Work Plan for Vapor Extraction Pilot Testing - Site 24 Report, Marine Corps Air Station El Toro, California"

As requested by the Office of Military Facilities, the Geological Services Unit (GSU) of the Department of Toxic Substances Control (DTSC) has reviewed the document entitled Draft Work Plan for Vapor Extraction Pilot Testing - Site 24, Marine Corps Air Station (MCAS) El Toro, California (draft Work Plan), dated April 1996. The document was prepared by Bechtel National, Inc. (Bechtel) for Southwest Division Naval Facilities Engineering Command (Navy).

The draft Work Plan presents the design and objectives of a soil vapor extraction (SVE) pilot test designed for Site 24. The purpose of the pilot test is to generate data that can be used to evaluate the efficiency of removing volatile organic compounds (VOCs) from the vadose zone. The draft Work Plan includes the engineering design of the SVE system but does not include a comprehensive description of the field procedures that will be implemented, or the details concerning the evaluation of the data. Below are general comments that should be addressed before the soil vapor extraction pilot test begins.

General Comments

1. Please include a section in the final work plan with a description of the test procedures. Bechtel's CLEAN II Program Procedures Manual does not include a standard operation procedure for a SVE pilot test, therefore site-specific test

protocol should be clearly outlined in the final work plan. The test procedures should be written in such a fashion that a field team can easily follow each step.

2. Please include a description of the pilot test design, in addition to the equipment description presented in the draft work plan. Clearly outline in the final work plan, the identifier for each observation location, field parameters collected at each location, and frequency of data collection at each location.
3. Section 3.3 - Equipment Start-up and Operations: Discuss in further detail the duration of the pilot test. For example, will the pilot test run for 14 days at steady state or will different extraction runs be performed?

Describe how VOC samples will be collected for analytical method 8010/8020 and if the samples will be analyzed on or off site.

4. Section 5 - Data Evaluation: Please provide details how pilot test data will be evaluated. For example; How will the potential effectiveness of SVE to remove the VOCs from the soil at Site 24 be evaluated? How will the data generated from the SVE pilot test be evaluated in regard to the air-sparging pilot test? If the pilot test proves favorable, exactly how will the number of wells required for remediation be estimated? Furthermore, what criteria will be used to judge if SVE is an effective remedial action?
5. Section 5.1 - Soil Vapor Extraction Radius of Influence: In the last sentence in Section 5 it is stated "The distance at which the remote vacuum is projected to be equal to one percent of the applied vacuum will be considered the effective SVE radius of influence." Please provide rationale for using a value of one percent to determine radius of influence.

If you have any questions or need clarification please call me at extension 5528.

State of California

Memorandum

To: Mr. Tayseer Mahmoud
Department of Toxic Substances Control
245 West Broadway, Suite 350
Long Beach, CA 90802-4444

Date: May 1, 1996

From: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SANTA ANA REGION
3737 MAIN STREET, SUITE 500, RIVERSIDE, CALIFORNIA 92501-3339
Telephone: CALNET 632-4130 Public (909) 782-4130

Subject: DRAFT WORK PLAN FOR SOIL VAPOR EXTRACTION PILOT TESTING -SITE
24 MARINE CORPS AIR STATION EL TORO CTO-0073/0130

We have reviewed the subject document dated April 16 , 1996 and received by us on April 23, 1996. After reviewing the document we find that we have no significant comment.

If you have any questions , please call me at (909) 782-4998.

Lawrence Vitale
Lawrence Vitale
DoD Section